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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,882	02/08/2002	Noboru Yokota	991183A	8324

38834 7590 11/18/2004

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WASHINGTON, DC 20036

EXAMINER


WHITMORE, STACY

ART UNIT	PAPER NUMBER
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2812

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/067,882	<b>Applicant(s)</b> YOKOTA ET AL.	
	<b>Examiner</b> Stacy A Whitmore	<b>Art Unit</b> 2812	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 8/27/2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-4, and 14-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5 is/are rejected.
- 7) ☒ Claim(s) 6-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

FINAL ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Edwards et al. (US Patent 5,625,568).
3. As for claim 5, Edwards teaches the invention as claimed, including a method of designing and manufacturing a semiconductor integrated circuit having an embedded array, said embedded array having basic cells arranged in a matrix, said method comprising the step of, in a design stage, modifying layout pattern data of said embedded array by detecting and removing a non-use area in a basic cell based on layout data of contact holes [abstract, fig.'s 1-5; col. 6, lines 38-43; col. 7, lines 35-40; col. 8, lines 24-65, especially lines 50-65 – and figs. 15-16; lines 50-65 show that the layout is modified by removing a portion of an impurity region which is based on layout data of contact holes: SEE ALSO fig.'s 15-18, and 1-5, figures 15-18 show the removal of a portion of an impurity region].
4. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto (US Patent 5,610,831).
5. As for claim 5, Matsumoto teaches the invention as claimed, including a method of designing and manufacturing a semiconductor integrated circuit having an embedded array, said embedded array having basic cells arranged in a matrix, said method comprising the step of, in a design stage, modifying layout pattern data of said embedded array by detecting and removing a portion of an impurity region in a basic cell based on layout data of contact holes [abstract; figs. 7a and 7b; col. 5, lines 31-64; SEE ALSO col. 6, lines 45-62].

6. Claims 6-13 are allowable over the prior art of record.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose either singularly or in combination at least judging one of said removal units as said non-use area if an individual contact hole pattern corresponding with said one of said removal units is non-existent.

8. Applicant's arguments filed August 27, 2004 have been fully considered but they are not persuasive.

Applicant argues in substance:

A: Edwards nor Matsumoto disclose modifying pattern layout data of said embedded array by detecting and removing a portion of an impurity region.

Examiner respectfully disagrees for the following reasons:

As to point A: Edwards discloses modifying pattern layout data of said embedded array by detecting and removing a portion of an impurity region [see as cited in the rejection of claim 5 above and also fig.'s 15-18, and 1-5, figures 15-18 show the removal of a portion of an impurity region].

Matsumoto discloses modifying pattern layout data of said embedded array by detecting and removing a portion of an impurity region [see as cited in the rejection of claim 5 above, and also col. 6, lines 45-62].

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

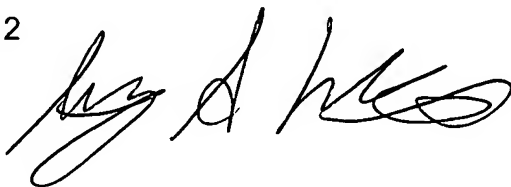
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy A Whitmore whose telephone number is (571) 272-1685. The examiner can normally be reached on Monday-Thursday, alternate Friday 6:30am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (571) 272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stacy A Whitmore  
Primary Examiner  
Art Unit 2812

SAW

A handwritten signature in black ink, appearing to read 'Stacy A. Whitmore', is written over the printed name and title.